Contactless reading system for chip cards placed on objects

Abstract

A contactless reading system, wherein a chip card is fixed on a planar support of an object such as a book (11) for identification by means of the data contained in the chip card, and a mobile reader (16) provided with an antenna in order to read the data of the card. The antenna of the reader (16) consists of a small-sized convolution disposed in a series with a large-sized convolution, which are concentric and which have the same winding direction. A maximum value is obtained for the component (H) of the electromagnetic field produced by the antenna parallel to the antenna at a given distance from the antenna. Maximum reception by the chip card of electromagnetic signals emitted by the antenna is obtained when the antenna is disposed in a perpendicular position in relation to the support of the card and at the given distance from the card.

Figure 1